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REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of this application and consideration and entry of this paper are respectfully requested in view of the herein remarks, which place the application in condition for allowance.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-12, 14-26 and 28-47 are pending in this application. Claims 5, 7-12, 19, 21-26 and 29-47 have been withdrawn from consideration. Claims 1-4, 6, 14-18, 20 and 28 are rejected in the Office Action mailed on July 11, 2006.

II. THE 35 U.S.C. §102(b) REJECTIONS HAVE BEEN OVERCOME

In paragraph 3 of the Office Action, claims 1-4, 6, 14-18, 20 and 28 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,033,779 to Andrews ("Andrews"). The rejections are traversed for at least the following reasons.

As understood by the Applicants, Andrews relates to a composite yarn formed of melt-fusible thermoplastic fibers combined with other fibers and/or materials includes a containment barrier that encapsulates one or more core materials which may present a threat of contamination to workers and/or the environment. The composite yarn includes a core covered by an adhesive layer of thermoplastic material which forms a containment barrier, combined with one or more subsequent overlying layers of fibers wrapped or otherwise applied thereto using conventional yarn construction methods. The cured and finished composite yarn is designed for knitting and weaving fabrics, or for otherwise forming cordage and nonwoven products. The composite yarn is also utilized to produce end products such as cut-resistant apparel for environments where workers are exposed to possibly contaminated products or where core materials in the yarn can damage the end product of manufacture. *See Andrews*, col. 1, lines 14-22.

As recited in independent claim 1, the instant invention is directed to a multilayer filament for use in an industrial fabric used in papermaking and related industries where the multilayer filament has a core comprised of a monofilament yarn surrounded by a plurality of respective layers and **a means for indicating the level of wear of an industrial fabric** comprised thereof. Because these fabrics have a limited lifespan and require regular replacement, there needs to be a means to indicate the wear level in the fabric, so that the fabric can be replaced in time, avoiding any catastrophic failure and loss, damage or shutting down of the machines. Moreover, because these industrial fabrics have a width of from 5 to over 33 feet, a length of from 40 to over 400 feet and weigh from approximately 100 to over 3,000 pounds, replacement of these fabrics often involves taking the machine out of service, removing the worn fabric, setting up to install a fabric and installing the new fabric. And because these fabrics are typically made to order, it is important to know the condition of the fabric being currently used on the paper machine. In the instant invention the individual monofilament yarn comprises the core and is surrounded by a plurality of respective layers. *See Instant Application*, page 6, lines 3-17. These plurality of layers, which can be dyes as recited in the specification, act as level indicators for wear of the industrial fabric e.g. a green color used as an outermost coating of the filament will indicate a healthy fabric, and a red color used as an innermost coating of the core filament would call for a replacement.

Applicants submit that Andrews fails to teach a multilayered filament that can indicate the wear level in an industrial fabric. Specifically, Andrews does not teach the concept of wear level indication and, on the contrary, is directed to the use of a containment barrier on core materials of a yarn which may present a threat of contamination to workers and/or the environment. The use of the containment barrier as taught by Andrews does not provide for the indication of the level of wear of elements in the yarn, nor do the relied upon portions of the

cited reference disclose a "plurality of respective layers," Applicants therefore respectfully request that the § 102 rejections be withdrawn.

In paragraph 6 of the Office Action, the Examiner asserts that Andrews discloses a multilayer filament possessing a means for indicating a level of wear of an industrial fabric comprised thereof. Applicants respectfully disagree. Applicants respectfully submit that the Examiner has not addressed the argument that Andrews is not related to industrial fabrics but to cut-resistant apparel, which is non-analogous art. Applicants further submit that the Examiner ignores the argument that Andrews does not address the instant problem i.e., indication of wear level in industrial fabrics, in its disclosure. Furthermore, the Office Action does not address the argument that Andrews is merely for increasing the strength and protection of garments such as cut-resistant apparel and is not used as a wear level indicator for industrial fabrics. The Examiner is respectfully requested to indicate the relied upon portions in Andrews that addresses these arguments.

In view of the foregoing, Applicants respectfully submit that independent claim 1 patentably distinguishes over the relied upon portions of Andrews, and is therefore allowable. Further, claims 2-4, 6 and 14 that depend from claim 1 are allowable therewith.

Similarly claim 15, which recites, *inter alia*:

"An industrial fabric for use in papermaking ... and means for indicating a level of fabric wear." also patentably distinguishes over the relied upon portions of Andrews, and is therefore allowable. Further, claims 16-18, 20 and 28 that depend from claim 15, are allowable therewith.

III. THE 35 U.S.C. §103(a) REJECTIONS HAVE BEEN OVERCOME

In paragraph 5 of the Office Action, claims 1-4, 6, 14-18, 20 and 28 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 5,685,014 to Dapsalmon ("Dapsalmon") in view of anyone of U.S. Patent No. 3,800,019 to Parsey et al. ("Parsey") or U.S.

Patent No. 6,653,943 to Lamb et al. ("Lamb") and further in view of anyone of U.S. Patent No. 4,651,514 to Collett ("Collett"), U.S. Patent No. 5,113,532 to Sutton. ("Sutton"), or U.S. Patent No. 6,033,779 to Andrews ("Andrews"). The rejections are traversed for at least the following reasons.

As understood by the Applicants, Dapsalmon is directed to a knitted piece of protective gear, such as a glove, to protect a person's limbs against injury. *See Dapsalmon*, col. 1, line 66 - col. 2, line 3. The piece of protective gear is knitted from yarns that "comprise[] a fiber core 3, surrounded by an outer fiber covering 4." *Id.* at col. 3, lines 46-47.

As disclosed in Dapsalmon, "[t]he composition of the high-resistance fibers of the yarn 2 is chosen from amongst aramids, polyethylenes, carbons, glass and/or metal fibers such as stainless steel fibers." *Id.* at col. 3, lines 54-56. Applicants submit that the yarns of Dapsalmon, specifically, yarns constructed from the high-resistance fibers recited above cannot be used in the present application. Firstly, these materials cannot be made into monofilaments that are suitable for the instant invention. For example, a monofilament yarn made from glass or a glass rod per se will shatter or break and fail due to its brittle nature during weaving. The only exception being polyethylene, which can be formed into a monofilament. However, due to its low melt temperature, the yarns are too soft to exhibit sufficient abrasion resistance. It should be understood that these industrial fabrics run 24 hours a day and 7 days a week, passing over abrasive stationary elements, and flexing around numerous rolls (up to and more than 180 degrees of the circumference) in a wet and usually hot and at times chemically damaging environments. Additionally, these fabrics are expected to run for many weeks if not many months. The materials used have to survive the hostile environment they are exposed to for long or relatively long periods of time.

Moreover, there are certain material characteristics due to which typical fibers of Dapsalmon cannot be used in the present invention,¹ such as fiber flexural or bending rigidity, hydrophobicity, and environmental safety, i.e., carbon and glass are very hazardous in a production environment such as in the industrial fabric production of the instant invention. In case such fibers are released to the environment, it can be harmful to humans, the environment, and/or the product being produced on the industrial fabric.

In the Office Action, the Examiner also contends that the limitations of claim 15 are taught by Dapsalmon in the paragraph bridging columns 1 and 2. The Applicants respectfully disagree. The relied upon portions of Dapsalmon do not teach the use of its fibers in the formation of a fabric specifically, an industrial fabric. The relied upon portions of Dapsalmon disclose “a knitted individual protective gear, a glove, mitten, mitt or muff for example, to guard an upper limb against mechanical risks.” Nowhere does Dapsalmon teach or disclose the use of the fibers in the formation of a fabric, specifically, an industrial fabric as that term is known to one skilled in the art.

Turning now to the other references, as understood by the Applicants, Parsey is directed to a rope structure constructed from a core of at least one bundle of filaments, wherein the core may be bound by a steel tape or wire or sheathed with two organic coatings of different colors, this clearly a distinct situation. In these configurations, damage or wear to the rope can be detected by measuring the resistance between the steel binding means or by a change in the color on the outside of the rope. *See Parsey*, col. 1, line 39 - col. 2, line 29.

Lamb, in contrast to the instant invention, is again directed to suspension ropes having

¹ In support of the arguments made in our previous responses that such fibers are inappropriate in the present invention, reference is made to representative Tables 3.2, 7.1 and Figure 7.5 of the book “High Performance Fibers” by J.W.S. Hearle, which show the properties of these materials.

polyurethane sheaths as used, for example, in an elevator assembly. *Lamb*, col. 2, lines 26-28.

As depicted in Figure 1a, the suspension or wire rope 4 is constructed from a wire rope that includes a plurality of load supporting wire members or strands. *Id.* at col. 3, lines 16-20.

Collett relates to an electrically non-conductive, cut and abrasion resistant yarn for use in the manufacture of protective coverings including a core of monofilament nylon having a diameter in the range of about 0.004 to 0.020 inches, a first wrap on the core of at least one strand of aramid fiber and a second wrap on the core of texturized nylon of two to eight ply construction, each ply made up of 24 to 44 nylon filaments. *See Collett*, col. 1, line 60 - col. 2, line 19.

Sutton relates to a method of making a protective garment, a garment produced in accordance with the method, and a strand material used in the method and garment. The strand material comprises cut resistant material such as KEVLAR®, aramid, metallic, and combined KEVLAR® and metallic strands, or the like, which are extrusion coated with vinyl, polyurethane or other suitable fluid impervious material. Coating the strands with fluid impervious material results in a cut resistant high strength fabric which is resistant to staining. *See Sutton*, col. 1, line 62 - col. 2, line 22.

It is well established that when a rejection depends on a combination of references, there must be some teaching, suggestion or motivation to combine the references. *See In re Rouffet*, 149 F.3d 1350, 47 USPQ 2d 1453 (Fed.Cir.1998). To prevent the use of hindsight, the examiner is required to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. *Id.* at 1357.

Further, in *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340 (January 27, 2000), *reh 'g en banc denied* (March 6, 2000), *cert. denied*, 120 S. Ct. 2679 (U.S. 2000), it was held that:

“Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be ‘clear and particular.’” (emphasis added).

As recited in the claims, the instant invention is directed to " [a] multilayer filament for use in an industrial fabric used in papermaking and related industries." (Emphasis added).

Dapsalmon fails to teach or suggest that the disclosed filament that is used in an industrial fabric. None of the cited references, either alone or in combination suggest or teach " [a] multilayer filament for use in an industrial fabric used in papermaking and related industries." (Emphasis added).

For at least the foregoing reasons, Applicants respectfully submit that independent claim 1 patentably distinguishes over the relied upon portions of Dapsalmon, Parsey, Lamb, Collett, Sutton and Andrews, either alone or in combination, and is therefore allowable. Further, claims 2-4, 6 and 14 that depend from claim 1 are allowable therewith.

Similarly claim 15, which recites, *inter alia*:

“An industrial fabric for use in papermaking ... and means for indicating a level of fabric wear.” also patentably distinguishes over the relied upon portions of Dapsalmon, Parsey, Lamb, Collett, Sutton and Andrews, either alone or in combination, and is therefore allowable. Further, claims 16-18, 20 and 28 that depend from claim 15, are allowable therewith.

CONCLUSION

In view of the foregoing, Applicants submit that the instant claims should be allowed and that the instant application is now in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are earnestly solicited. Statements

appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicants' undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

The Commission is authorized to charge any fee occasioned by this paper, or credit any overpayment of such fees, to Deposit Account No. 50-0320.

Respectfully submitted,
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